



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,253	06/09/2005	Tetsuyuki Narabayashi	1217-051428	1862
28289	7590	08/16/2007		
THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219			EXAMINER DONDERO, WILLIAM E	
			ART UNIT 3654	PAPER NUMBER
			MAIL DATE 08/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/538,253

Applicant(s)

NARABAYASHI, TETSUYUKI

Examiner

William E. Dondero

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

**DETAILED ACTION*****Claim Objections***

Applicant is advised that should claims 3 and 6 be found allowable, claims 7 and 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-4, and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (Specification page 2, line 18 – page 5, line 7; Figures 3-4) in view of Ito (US-5755522) and Gayoso (US-6823920). Regarding Claims 1, 3 and 8, Applicant's Admitted Prior Art discloses a spacer take-up device in an apparatus for processing a film carrier tape 100 for mounting an electronic component comprising a feeding device 106 for feeding the film carrier tape for mounting an electronic component which is wound up a reel 104 through a spacer 102 to a predetermined apparatus 101 for processing the film carrier tape for mounting the electronic component; and a spacer take-up

Art Unit: 3654

device 108 for winding the spacer fed out of the feeding device upon a reel 110, and a take-up driving shaft (shown but not numbered) of the spacer take-up device is coupled to a second motor 118 (Specification: page 2, line 18 – page 5, line 7; Figures 3-4). Applicant's Admitted Prior Art is silent about a feed driving shaft of the reel of the feeding device being coupled to a first driving motor, a clutch always set in a slip state, which always rotates the take-up driving shaft at a higher speed than a predetermined speed and the tension to be applied to the spacer is thus set within a predetermined tension, for coupling the take-up driving shaft and the second driving motor, and an amount of take-up of the spacer take-up device is set to be greater than that of the feeding device, thereby taking up the spacer at a constant tension. However, Ito discloses a clutch (formed by a coil spring 30 wrapped around a rotary shaft of a driven pulley 14) always set in a slip state, which inherently always rotates the take-up driving shaft at a higher speed than a predetermined speed and the tension to be applied to the spacer is thus set within a predetermined tension, to couple the driving mechanism (drive pulley 14) with a take-up device 12 and an amount of take-up of a web material 8 being set to be greater than that of a feeding device 3, thereby taking up the web at a constant tension (Figures 1-5; Column 4, Lines 40-51). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the clutch of Ito between the motor and take-up driving shaft of Applicant's Admitted Prior Art to reduce the slack at the take-up device by taking up the spacer with a constant tension as taught by Ito (Column 4, Lines 40-51). Further, Gayoso discloses driving a feeding and winding apparatus with one motor or multiple

Art Unit: 3654

independent motors (Figures 1-9; Column 4, Lines 39-53). It would have further obvious to one of ordinary skill in the art at the time of the invention to control the feeding and take-up devices with independent first and second motors as taught by Gayoso to simplify the control system and make it more precise.

With respect to claim 9, Applicant's Admitted Prior Art (Specification page 2, line 18 – page 5, line 7; Figures 3-4) in view of Ito (US-5755522) and Gayoso (US-6823920) does not disclose specific values for the tension applied by the clutch. However, one of ordinary skill in the art is expected to routinely experiment with the parameters, especially when the specifics are not disclosed, so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been obvious through routine experimentation and optimization, for one of ordinary skill in the art to make the tension applied by the clutch 50 to 5000 gf to achieve the proper tension without any slack at the take-up device.

Regarding Claims 4, 6-7, and 10, the method described in these claims would inherently result from the use of the spacer take-up device of Applicant's Admitted Prior Art (Specification page 2, line 18 – page 5, line 7; Figures 3-4) in view of Ito (US-5755522) and Gayoso (US-6823920).

### ***Response to Arguments***

With respect to Applicant's arguments starting on page 6, line 25 to page 7, line 29, Applicant argues the combination of Applicant's Admitted Prior Art in view of Del Bianco et al. does not teach or suggest two separate motors.

Art Unit: 3654

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

With respect to Applicant's arguments starting on page 7, line 30 to page 8, line 17, Applicant argues the combination of Applicant's Admitted Prior Art in view of Del Bianco et al. does not teach or suggest the amount of take-up of the spacer take-up device being set to be greater than that of the feeding device. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment, including the addition of the limitation, "second" to Claim 1, Line 11 and Claim 4, Line 11, necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3654

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William E. Dondero whose telephone number is 571-272-5590. The examiner can normally be reached on Monday through Friday 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WED/



PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600